Supplementary Information

In-House Validation of HPLC-MS/MS Methods for Detection and Quantification of Tetracyclines in Edible Tissues and Feathers of Broiler Chickens

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Table S1. Parameters of MS/MS detector

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Analytical condition</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Ionization</td>
<td>negative ion mode with a turbo ion spray TM</td>
<td></td>
</tr>
<tr>
<td>Scan type</td>
<td>MRM</td>
<td></td>
</tr>
<tr>
<td>Source temperature / °C</td>
<td>450</td>
<td>480</td>
</tr>
<tr>
<td>Nebulizer / psi</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Turbo ion / psi</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Curtain gas / psi</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Collision gas / psi</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Ion spray voltage / V</td>
<td>−3000</td>
<td>−3000</td>
</tr>
<tr>
<td>Entrance potential / V</td>
<td>−10</td>
<td>−10</td>
</tr>
<tr>
<td>Dwell time / ms</td>
<td>250.0</td>
<td>250.0</td>
</tr>
</tbody>
</table>

*aTransmission mode; bmultiple reaction monitoring.

Table S2. Masses for parental ion and product ion, average retention times and coefficient of variation (CV) by analyte

<table>
<thead>
<tr>
<th>Analyte</th>
<th>Parental ion mass</th>
<th>Product ion mass</th>
<th>Average retention time / min</th>
<th>CV / %</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTC</td>
<td>461.00</td>
<td>426.00</td>
<td>12.717</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>381.00</td>
<td>12.717</td>
<td>0.32</td>
<td></td>
</tr>
<tr>
<td>4-epi-OTC</td>
<td>461.00</td>
<td>426.00</td>
<td>8.267</td>
<td>2.41</td>
</tr>
<tr>
<td></td>
<td>381.00</td>
<td>8.258</td>
<td>4.24</td>
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</tr>
<tr>
<td>CTC</td>
<td>479.00</td>
<td>444.00</td>
<td>14.617</td>
<td>0.28</td>
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<tr>
<td></td>
<td>154.00</td>
<td>14.600</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>4-epi-CTC</td>
<td>479.00</td>
<td>444.00</td>
<td>10.142</td>
<td>2.3</td>
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<tr>
<td></td>
<td>154.00</td>
<td>10.108</td>
<td>1.99</td>
<td></td>
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<tr>
<td>TC-(d_6)</td>
<td>451.00</td>
<td>416.00</td>
<td>11.758</td>
<td>0.96</td>
</tr>
</tbody>
</table>

OTC: oxytetracycline; CTC: chlortetracycline; TC-\(d_6\): deuterated tetracycline.

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